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FILE NUMBER 20170-002

DIRECT DIAL

January 7, 2000

BY FEDERAL EXPRESS

Magalie Salas, Esq.
Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-B204
Washington, D.C. 20554

RE: MM Docket No. 90-189

Dear Ms. Salas:

Transmitted herewith is original and five copies of Gold Country Communications' Reply to Application For Review of Nevada County Broadcasters, Inc.

Please date stamp receive the enclosed copy and return it in the self-addressed, postage-paid envelope.

Very truly yours,

McQUAID, METZLER, BEDFORD
& VAN ZANDT, LLP

By: _____
Roger J. Metzler

RJM/mb
Enclosures

cc: Robert Hayne, Esq. (w/enclosure)
James P. Riley, Esq. (w/enclosure)
Larry Rutter (w/enclosure)
Public File

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ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In the Matter of	)	
	)	
Amendment of Section 73.202(b),	)	MM Docket No. 90-189
Table of Allotments,	)	RM-6904
FM Broadcast Stations	)	RM-7114
Farmington, Grass Valley, Jackson	)	RM-7186
Linden, Placerville and Fair Oaks	)	RM-7298
California, and Carson City and	)	
Sun Valley, Nevada	)	

To: Commission

REPLY TO APPLICATION FOR REVIEW
OF NEVADA COUNTY BROADCASTERS, INC.

1. Gold Country Communications, Inc., ("KNGT") licensee of KNGT, Jackson, California, a California corporation, through counsel, hereby files a Reply to the Application for Review filed by Nevada County Broadcasters, Inc. ("KNCO").[1]

2. Before KNGT gets into the details of its response to KNCO's petition, it is important to focus on what this case is all about. KNCO quite adroitly avoids mentioning what is happening, directing attention away from the facts and onto a myriad of details, most of which are not relevant. This case is simple. It involves an upgrade by KNCO that would have forced KNGT to change channels, which in turn would create new interference and KNGT's listeners

[1]The reply was due December 20, 1999. Due to the Commission's announced AM freeze, KNGT's engineer was busy with Applications that needed to be filed prior to the December cut-off date. KNCO graciously consented to an extension of time to reply until January 10, 2000, and a motion was timely made.

would lose service[2]. Acting upon a Petition for Reconsideration filed by Gold Country, the decision was reversed[3]. The proposed change would never have been granted had the FCC, before the Report & Order, focused on the effect that the proposed move would have had on KNGT[4]. The public interest as well as the squarely on point prior cases that KNGT found, all state that forcing KNGT to change channels when the predictable result is a loss of service by existing listeners is not something that the FCC allows. Thus, this should not be a hard case to decide.

3. The problem with this case is that KNGT provided information detailing the objectionable interference *after* the Report & Order first granted the channel change, in a Supplement to its Petition for Reconsideration. KNGT believes that the strong public interest in avoiding causing unnecessary and destructive interference to 25,000 people outweighs the administrative inconvenience involved in accepting the late filed information. The FCC obviously agreed because it accepted the Supplement to the Petition for Reconsideration, thus allowing KNGT to supplement its Petition with information that it had not developed prior to that point[5]. There is no question that KNGT recognized in its Supplement to the Petition for

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[2] The material previously submitted by KNGT shows that the channel change ordered for KNGT would have created new interference to an area in excess of 1107 square kilometers, covering in excess of 25,000 people. It also showed that two new short-spacings would have been created, in violation of the FCC's rules. The FCC's staff study also reported 1107 square km. of interference affecting over 25,000 people, and made the additional observation that the total population served was 36,000.

[3]The reversal also granted an upgrade and channel change for KNCO, but the basis for the petition for reconsideration was solely on the objection to massive interference.

[4]KNGT assumes that it was due to the interfering station being a grandfathered 'superpower' station that the potential for interference was not flagged by the FCC's computers.

[5]KNGT changed counsel after the initial action by the FCC.

Reconsideration (and the FCC recognized in its Report & Order) that this information could have been supplied earlier and was not. KNGT argued then, and supporting the staff decision, continues to argue now, that the facts surrounding this matter are precisely the kind of fact situation that the FCC had in mind for the application of Section 1.429(b) of the Commission's rules, 47 C.F.R. §1.429(b). This provision, a safety valve for the FCC to allow it to reach the right result based on all the information then before it, is what allowed KNGT to file the material provided in the supplement. The FCC did its own study, and came to the conclusion that the allegations of substantial interference to the only broadcast station licensed to Jackson, California were substantiated. It then, correctly, concluded that prior Commission precedent as well as the public interest standard dictates that the channel change for KNGT should not be ordered.

4. This means that KNCO cannot get its upgrade, and that KNGT does. As a result, KNCO attacks every portion of the decision. First, KNCO harps on the acceptance of the Petition as untimely (which clearly it was not[6]), then treats the acceptance of the Supplement as the equivalent of accepting the Petition for Reconsideration (which clearly it was not) and completely ignores the application of §1.429(b). From there, KNCO attacks the engineering that the FCC did and that KNGT supplied. The end result of what KNCO wants to accomplish is to have the FCC ignore the finding of its staff that the channel change would create new interference to 25,000 of the 36,000 people served in KNGT's 60dBu contour.

5. The Commission's rules specifically allow the Commission to consider a petition for reconsideration based on facts which have not previously been presented to the Commission if consideration of the facts is in the public interest. Clearly, consideration of facts verifying

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[6]The Petition was filed in time, even though the certificate of service was not.

potential unacceptable interference to the operation of an existing station is in the public interest. The *Vallejo*[7] and *Muncie*[8] cases cited in the Supplement both plainly say that it is not in the public interest to force an existing station to change channels and accept interference. The Commission has been presented numerous times with the question of whether belated consideration of evidence of interference is in the public interest and whether it is, in effect, its own 'good cause.' In *Clovis Broadcasters*, 61 FCC 2d 362 (1976), the Commission stated that, even if it had found no other good cause to grant the petition, it would, "after its own review of the submitted data, [have] determined that the likelihood of interference [was] sufficient to require further consideration in the public interest as contemplated in Section 1.106(c)(3)[9] of the Rules", 61 FCC 2d 363. The Commission then considered, in detail, the allegations of prohibited interference. In other words, credible claims of destructive interference are a *prima facie* showing of good cause. See also *Southwest Broadcasting Co., Inc.*, 18 FCC 2d 858 (1969). The Commission recognized and applied that standard in this case:

> "Notwithstanding the lack of ordinary diligence by Gold Country in raising the issue of interference, we believe that the public interest requires that we consider the allegation of significant interference to the only broadcast station licensed to Jackson, California." (MO&O Docket 90-189, Released Nov. 5, 1999, paragraph 9)

6. Faced with cases squarely on point, a proposal that flies in the face of consistent FCC policy, and an FCC decision inconsistent with what it wants, KNCO argues the only thing open to it, . . . technicalities.

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[7]Vallejo, California [Broadcast Bureau], 40 Rad. Reg. 2d (P&F) 648 (1977).

[8]Muncie, Indiana, 32 FCC 2d 839, 23 Rad. Reg. 2d (P&F) 1672, (1972).

[9]Section 1.106(c)(3) of the Commission's rules is now Section 1.102(c)(2), 46 Rad. Reg. 2d (P&F) 524 (1979).

7. The basis of most of KNCO's arguments is that KNGT did not make any claim about interference in its original Petition for Reconsideration. It is true that KNGT did not; however, clearly KNGT has shown good cause for acceptance of the Supplemental material and the Commission has accepted it. Moreover, KNCO does not ever contest the 'good cause' showing. And, of course, KNCO's most recent argument concerning 'no mention of interference in the original Petition' is the same as the argument it made when KNGT first filed its Supplement to the Petition. Thus this part of KNCO's argument is rehashing an old argument that it has already lost. KNGT recognized that it had to meet a tough standard in §1.429(b) for submitting information not previously presented to the Commission. It felt it had done so, and, quite obviously, so did the Commission's staff (which routinely processes and denies similar requests which it feels do not meet that standard). Should KNGT have directed the FCC's attention to the adverse effects earlier than it did. Of course; and if it had done so, it would not be arguing about whether it had shown 'good cause' to make a supplemental filing.

8. When considering KNCO's argument about timely filing, it bears repeating that KNGT's Petition for Reconsideration was timely filed and the Supplemental filing was accompanied by a Petition to Accept the Supplemental pleading. KNGT acknowledged the lateness of the information in the Supplemental pleading when it was filed, and acknowledged that it had to meet the standard for supplemental pleadings. It believed that it did, and the staff, by its acceptance, did too.[10]

9. KNCO goes to great lengths in its pleading concerning timeliness, making

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[10]In fact, most of KNCO's agreements about untimeliness are irrelevant, because under current FCC rules and guidelines KNGT could have included all the material KNCO objects to in this Reply to KNCO's Petition for Review.

numerous claims about technicalities that no one can argue with, but the cases cited and conclusions reached do not fit the facts of the present matter. Thus, when KNCO states that "the Commission lacks authority to extend or waive the 30-day filing period for reconsideration set forth in 47 USC 405" it is stating hornbook law, but that law does not apply to the facts of this case because KNGT filed a timely Petition for Reconsideration. KNCO states that "the only exception to the rule [the 30 day period within which a petitioner must file the petition for reconsideration] is if the petitioner shows that its failure to file for reconsideration in a timely manner resulted from 'extraordinary circumstances'", citing cases. KNGT is confident that those cases do stand for the proposition advanced, and the cites are accurate, but they are irrelevant because KNGT filed its Petition for Reconsideration within the time period allowed by law. Likewise, KNCO cites cases stating that the Commission has held an applicant responsible for mistakes of its counsel or consultants. Once again, KNGT does not argue with the cases or KNCO's reading of them. However they are as irrelevant as tax cases to this matter. KNGT did not claim that the reason the FCC should have accepted the supplemental pleading was that its prior counsel made a mistake. KNGT did claim that prior counsel neglected to investigate the effect of the channel change, presumably assuming that the FCC would not propose a channel change in violation of its own rules and precedent, or that the FCC would not propose an action causing substantial interference. However, the point of KNGT's claim was not that prior counsel made a mistake but that the overlooked data was so serious and significant that, even though it was first raised in a supplemental pleading, it should be considered. Thus it is clear that KNGT did not rely on mistake of counsel as the reason that the Petition to file Supplemental Pleading should be accepted, nor the reason that the Petition for Reconsideration should be granted.

KNGT relied upon legitimate reasons (substantial, destructive interference affecting 25,000 listeners) for requesting an acceptance of the filing the supplemental petition.

10. KNGT believes that this matter is not about technicalities of pleadings and deadlines. It is about whether the FCC, now having full awareness of substantial and material interference that a proposed channel change would cause, should order that change and create interference and short-spacing because KNGT only recognized that fact in time to provide information to the FCC in a supplement to a petition for reconsideration. KNGT believes that the public interest says that 25,000 people in a 1100 square kilometer area should not lose their only local service, especially where the correction can be made before the order has become final.

11. After having spent the great part of its argument commenting on late filing, KNCO brings out essentially the same arguments it made before regarding engineering. It says that KNGT's pleading (and now the FCC's action) was 'based on an utterly erroneous standard' confusing interference with contour protection, but doesn't cite any cases or rules to support its claim. KNCO also claims that the interference won't be as bad as KNCO's engineer[11] stated because there are mountains in the way[12] and that the staff relied upon KNGT's flawed engineering. While arguments concerning engineering are not easy to judge, the important point to remember here is that the FCC's staff did not rely upon either KNGT's nor KNCO's engineering. To quote from the MO&O:

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[11]Ignoring the fact that the FCC agreed with KNGT's engineer based on the FCC's own independent study.

[12]Of course, if the channel change were to be ordered, it would not be KNCO which would have to live with the interference resulting from the channel change, so the engineer's claim that some station other than his client can live with the interference is a bit suspect.

"We have done our own engineering study concerning the level of interference Station KFRC-FM would cause to a Channel 259A operation by Station KNGT in Jackson." (MO&O, supra, para. 10.)

12. KNCO disputes that the FCC's engineering is reliable and that its assumptions are reasonable. This was done, of course, because the staff's engineering study showed that KNGT would suffer substantial interference.

"As stated earlier, the modification of the Station KNGT license to specify operation on Channel 259A will result in a loss of existing Station KNGT service to approximately 25,138 persons in an area of 1,107 square kilometers. We cannot make a finding that impairing the only broadcast station licensed to Jackson is in the public interest." (MO&, supra, para. 11.)

13. KNGT's engineer, whose work (as well as the FCC's) was called into question has provided more detailed and more sophisticated calculations, based on the "Longley-Rice" model as set forth in what is generally referred to as Tech Note 101. It is KNGT's understanding that the Longley-Rice model takes diffraction and the other objections of KNCO's engineer into account. The work was done and plotted on maps attached to the report (Exhibits 1 to 7 in the engineering report attached to this pleading). They are summarized as follows "Although intervening terrain obstructions block Jackson from direct line-of-sight from the KFRC antenna center of radiation, the signal from this super-powered co-channel station is so strong that it is diffracted over the terrain sufficiently to produce an interfering signal that would disrupt the service area of KNGT(FM)."

14. This is consistent with the findings of the FCC's engineering study. In fact, losing 25,000 out of 36,000 population probably earns a more significant qualifier than "disrupt the service areas of KNGT(FM)". Furthermore, KNGT's engineer graphed the predicted signal strength along the radial from the KFRC antenna to the KNGT antenna. The results are shown in

Figure 7 in the engineering report: the "signal strength of KFRC-FM within portions of the KNGT (FM) service area would be of sufficient strength to cause objectionable interference." This is, no surprise here, consistent with the FCC's analysis. The engineer finishes his report as follows:

> "It is concluded that significant interference from co-channel station KFRC-FM would result to KNGT(FM) if it were operating on Channel 259A. Therefore, Channel 259A is not an equivalent facility to that now in operation on channel 232A by KNGT(FM). Therefore the basis for Nevada County's *Application for Review* is technically unfounded and should be summarily dismissed."

15. In summary, the Petition was timely served, the supplemental petition showing the significant interference and loss of service to the only station licensed to Jackson was proper, good cause was shown for its acceptance, and the engineering supplied by KNGT was demonstrated to be correct by the staff's independent engineering study.

Thus the staff action should be affirmed and the petition for review denied.

Respectfully submitted,

Gold Country Communications, Inc.

By: _____

Roger J. Metzler
McQUAID, METZLER, BEDFORD
& VAN ZANDT, LLP
221 Main Street, 16th Floor
San Francisco, CA 94105
Telephone: 415-905-0200
Fax: 415-905-0202

Its Attorneys

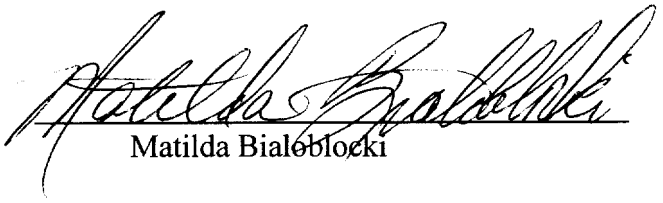
December 7, 2000

CERTIFICATE OF SERVICE

I, Matilda Bialoblocki, a secretary with the law firm of McQuaid, Metzler, Bedford & Van Zandt, LLP, do hereby certify that true copies of the foregoing "**Reply to Application for Review of Nevada County Broadcasters, Inc.**" was sent this 7th day of January, 2000, by first-class mail postage prepaid, to the following:

Robert Hayne, Esq.
Mass Media Bureau
Federal Communications Commission
445 12th Street, SW, Room 2A-134
Washington, DC 20554

James P. Riley, Esq.
Jennifer Dine Wagner, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Rosslyn, Virginia 22209
Counsel for Nevada County Broadcasters, Inc.



Matilda Bialoblocki

ENGINEERING STATEMENT IN RESPONSE TO APPLICATION FOR REVIEW MM DOCKET NO. 90-189

January 5, 2000

Gold Country Communications, Inc.
Radio Station KNGT(FM)
FM Channel 232A ▫ 94.3 Megahertz
Jackson, California
FCC File No. BLH-7524

LAWRENCE L. MORTON ASSOCIATES
2867 BELDEN DRIVE
HOLLYWOOD HILLS, CALIFORNIA 90068-1901
(323) 467-5010 / FAX (323) 467-5848

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ENGINEERING STATEMENT

This engineering study was prepared on behalf of Gold Country Communications, Inc., ("Gold Country"), in response to an *Application for Review* filed by Nevada County Broadcasters, Inc., ("Nevada County"), of the *Memorandum Opinion and Order*, MM Docket No. 90-189, DA 99-2453, released November 5, 1999.

Nevada County has represented that the Gold Country supplemental pleading in this proceeding was technically flawed and was "based on an utterly erroneous standard."

In the engineering statement dated November 9, 1995 prepared on behalf of Gold Country it was shown that significant contour overlap would occur from co-channel, super-powered, Class B station KFRC-FM to the protected service contour of KNGT(FM) if it were operating on Channel 259A.

Figure 1 depicts the 70 and 60 dBμ F(50,50) service contours of a Class A facility operating at the licensed site of KNGT(FM). As a Class A station, KNGT(FM) is entitled to protection to its 60 dBμ F(50,50) contour. A separate, more detailed study was performed to determine actual field strength levels within the area using a more sophisticated method of propagation analysis.

The KNGT(FM) field strength levels over the relevant portion of its service area were predicted using the following method. The field strength along radials spaced at 0.25-degree intervals was studied in detail from terrain extracted from the DMA three arc-second point elevation database sampled at 10-meter distance intervals. To determine the signal strength at each point along the radials, the vertical plane radiation characteristics were computed at each vertical depression angle from horizontal. The vertical angle was obtained by assuming a transmitting antenna center of radiation of 805 meters AMSL and a receiving antenna height of 9 meters above ground at each point considered, and the horizontal distance to the point.

When a point was shielded from direct line-of-sight from the transmitting antenna, the vertical angle was taken to be the angle to the top of the highest apparent obstruction between the transmitting antenna and the point of interest assuming an effective earth radius 4/3 that of the actual radius to account for atmospheric refraction.

The field strength at each point was then computed using a computerized implementation of the tropospheric radio propagation model developed at the Institute for Telecommunications Sciences and Aeronomy, Environmental Science Services Administration, National Bureau of Standards, by P. L. Rice, Anita G. Longley, Kenneth A. Norton and A. P. Barsis, and published for the first time in 1965. This model, known as the Longley-Rice propagation model is also commonly called "Tech Note 101."

The model depends on propagation path geometry and atmospheric refractivity near the surface of the earth. Calculations of expected transmission loss for paths within the radio horizon are based on geometric-optics ray theory. For paths with a common horizon, Fresnel-Kirchoff knife-edge diffraction theory is applied. For double horizon paths that extend only slightly over the horizon, a modification of the Van der Pol-Bremmer method for computing field intensity in the far diffraction region is used. For longer paths, extending well beyond the radio horizon, predictions are based on forward scatter theory. When some doubt exists about which propagation mechanism predominates, transmission loss is calculated by two methods and the results are combined.

Figure 2 is a map representing the results of this study, using colors to represent the various signal strength levels. The map shows also the location of the KNGT(FM) transmitter site.

The F(50,10) signal strength levels of the KFRC-FM licensed facility were computed using the same methods and the results are presented on Figure 3. A transmitting antenna height of 452 meters was used, which corresponds to the KFRC-FM licensed facility. Figure 4 represents the results of a detailed analysis of these field strength levels over the general area within which KNGT(FM) would provide service as a Class A facility. The scale and origin of this map coincides with the maps of Figures 1 and 2.

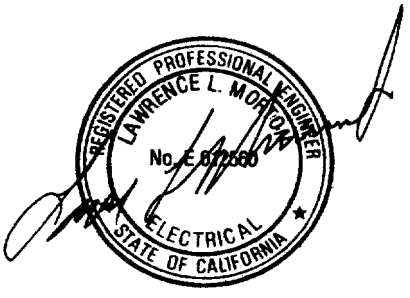
Interference from a co-channel station is considered to exist when the interfering station's signal strength exceeds by -20 dB the signal strength level of the desired station. The results of these studies were combined to produce the representation shown on Figure 5. This map depicts in pink the areas within which the KFRC-FM F(50,10) signal strength levels exceed by -20 dB the F(50,50) signal strength levels of KNGT(FM).

Although intervening terrain obstructions block Jackson from direct line-of-sight from the KFRC-FM antenna center of radiation, the signal from this super-powered, co-channel station is so strong that it is diffracted over the terrain sufficiently to produce an interfering signal that would disrupt the service area of KNGT(FM). Figure 7 is a graph depicting the predicted signal strength levels of KFRC-FM along a radial of 63.69 degrees true, which

is a direct line between the KFRC-FM and KNGT(FM) transmitter sites. The figure further shows that the signal strength levels of KFRC-FM within portions of the KNGT(FM) service area would be of sufficient strength to cause objectionable interference.

Figure 6 shows the same interference areas as figure 5 but includes also the locations of the 1990 U.S. Census block centroids. All Census blocks within the pink shaded areas would be subject to received interference from KFRC-FM. Note that there are a substantial number of these blocks within the interference areas.

It is concluded that significant interference from co-channel station KFRC-FM would result to KNGT(FM) if it were operating on Channel 259A. Therefore, Channel 259A is not an equivalent facility to that now in operation on Channel 232A by KNGT(FM) Therefore, the basis for the Nevada County *Application for Review* is technically unfounded and should be summarily dismissed.



Lawrence L. Morton, P.E.
Consulting Telecommunications Engineer
January 5, 2000

AFFIDAVIT

State of California)
) **ss:**
County of Los Angeles)

Lawrence L. Morton, being first duly sworn upon oath, deposes and says:

- That he is a qualified engineer,
- That he is a Registered Professional Engineer in the State of California,
- That he is a member of the Association of Federal Communications Consulting Engineers,
- That his qualifications are a matter of record with the Federal Communications Commission,
- That he has prepared many broadcast applications and engineering exhibits that have been filed with and granted by the Federal Communications Commission,
- That he has carried out such engineering work and that the results thereof are attached hereto and form part of this affidavit, and
- That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge.

Date: January 5, 2000

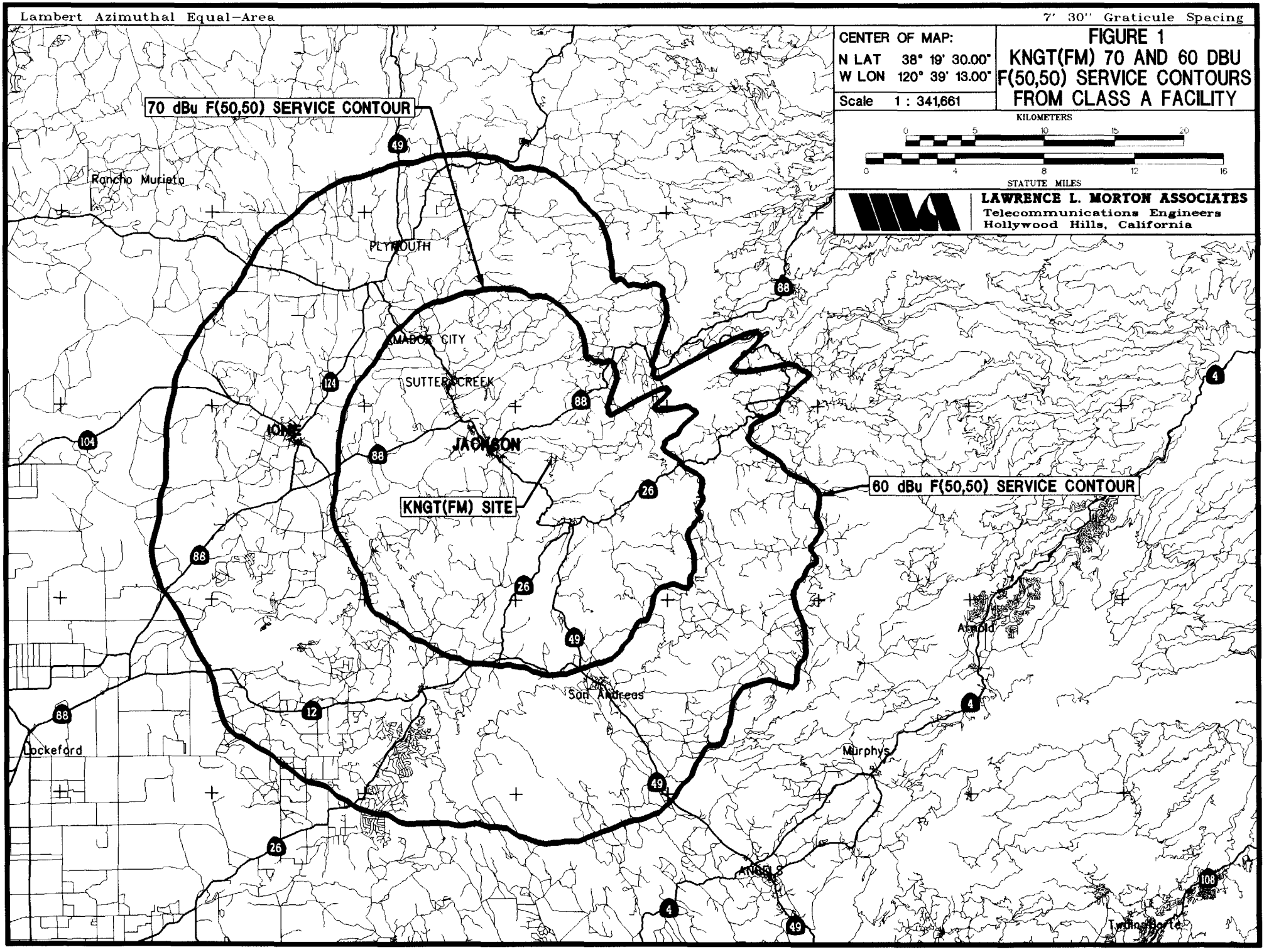
Lawrence L. Morton, P.E.

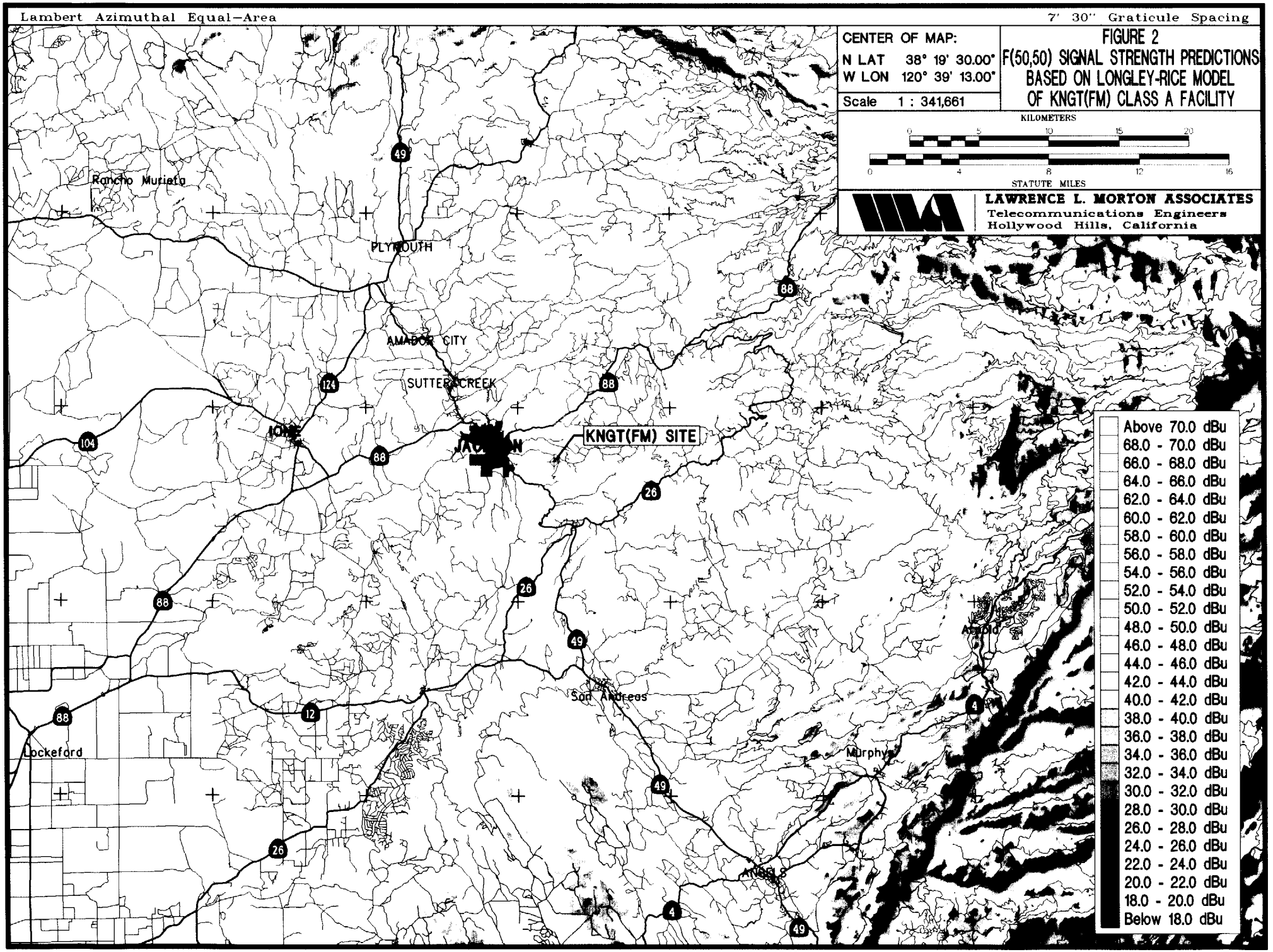
On January 5, 2000, before me, Linda Lu, a Notary Public, in and for the State of California, personally appeared Lawrence L. Morton known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

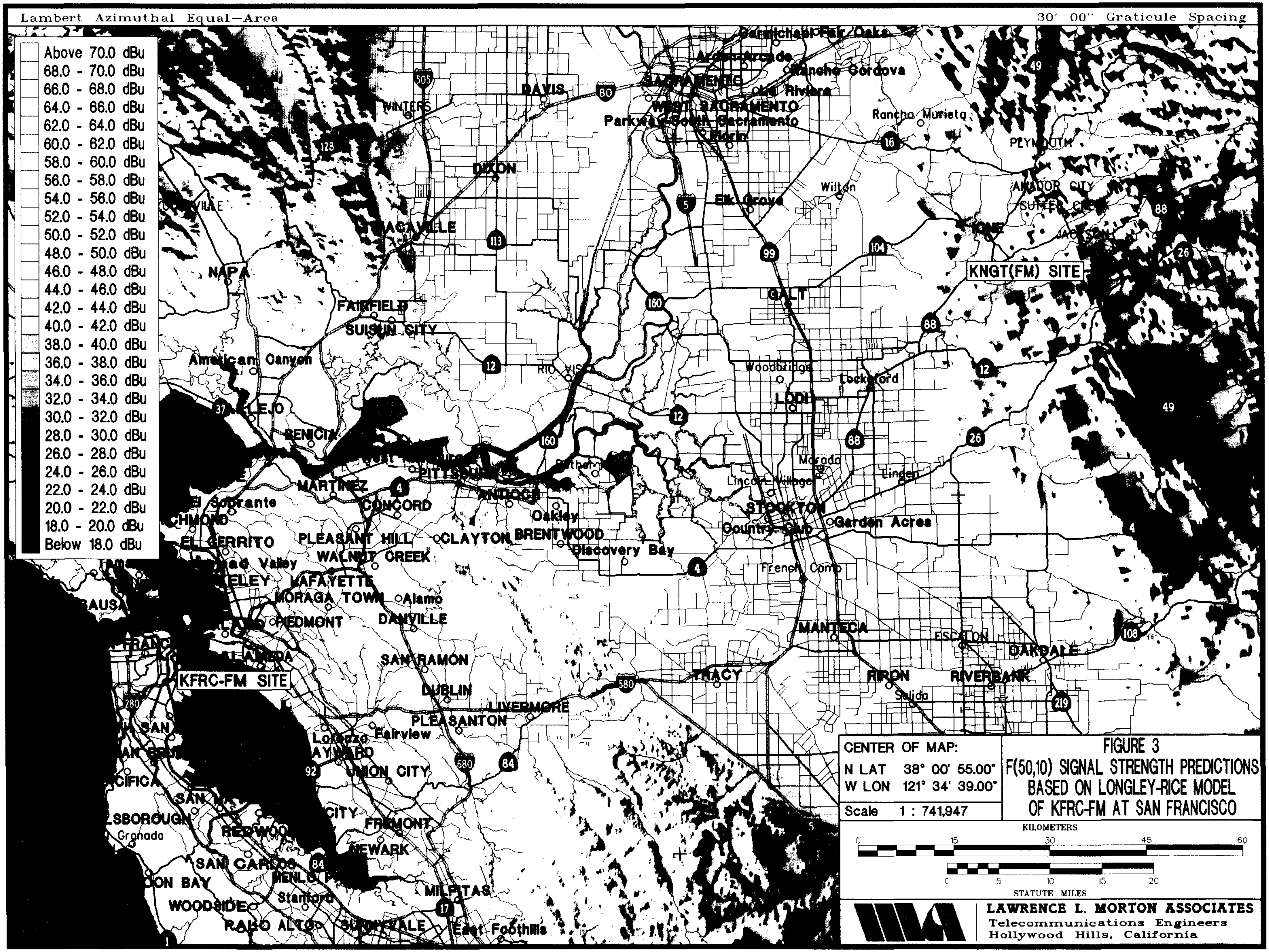
My Commission expires 11/30/2001

Notary Public

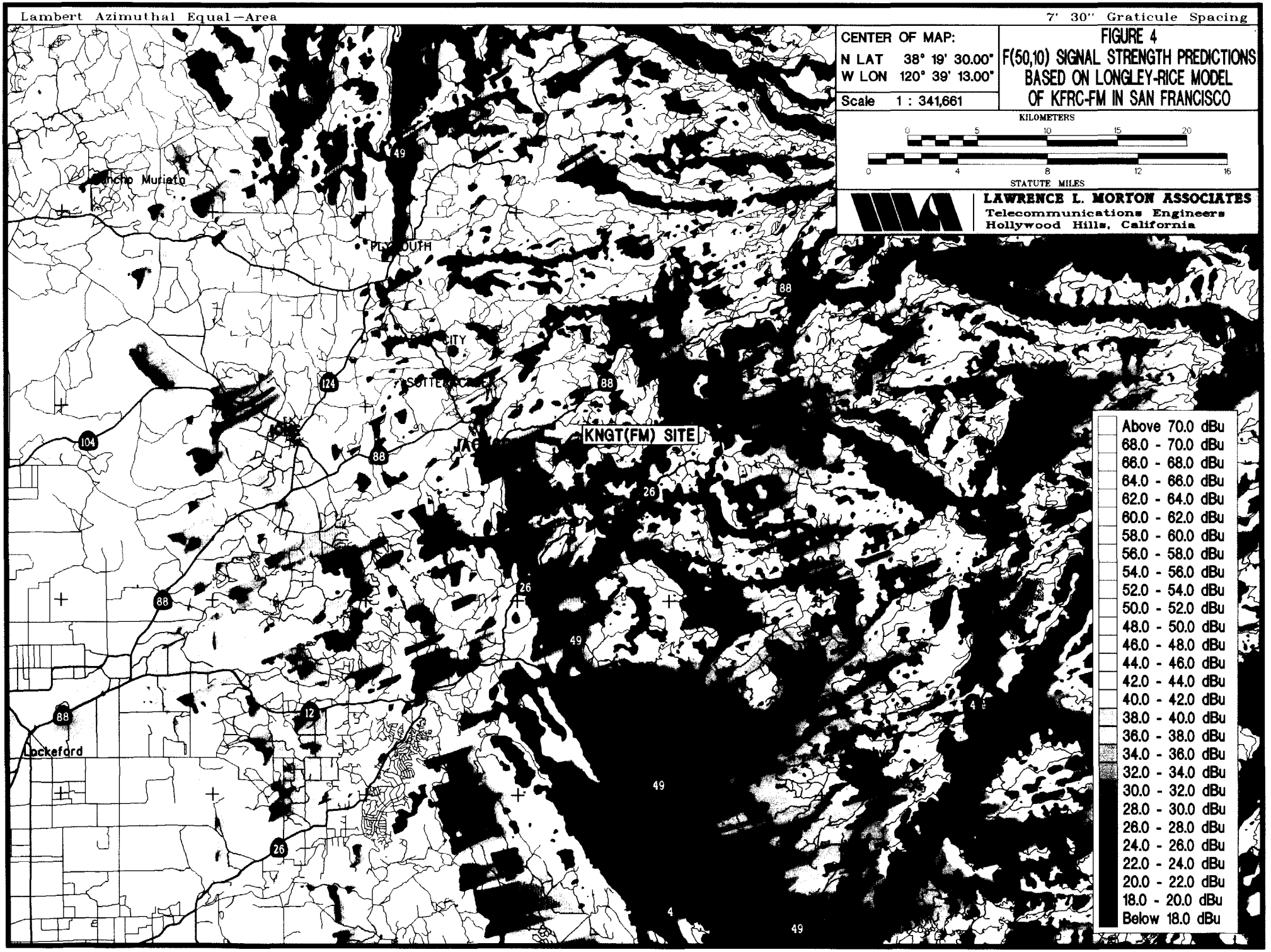
OFFICIAL SEAL
LINDA LU
Notary Public California
LOS ANGELES COUNTY
My Comm. Expires Nov 30, 2001

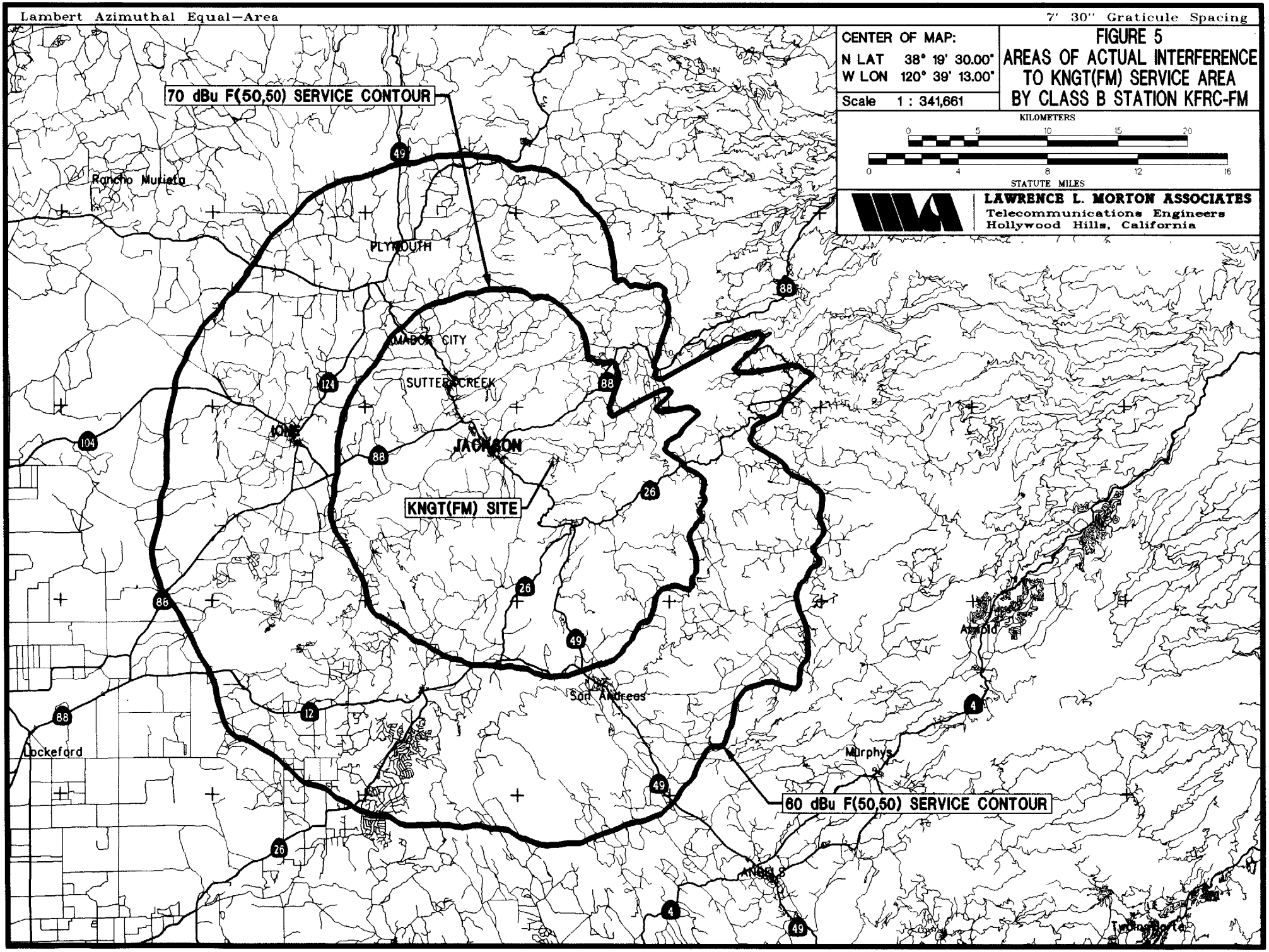

Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
CENTER OF MAP:
N LAT 38° 19' 30.00"
W LON 120° 39' 13.00"
Scale 1 : 341,661
FIGURE 1
KNGT(FM) 70 AND 60 DBU F(50,50) SERVICE CONTOURS FROM CLASS A FACILITY
KILOMETERS
0 5 10 15 20
0 4 8 12 16
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California
70 dBu F(50,50) SERVICE CONTOUR
60 dBu F(50,50) SERVICE CONTOUR
KNGT(FM) SITE
Rancho Murieta
PLYMOUTH
AMADOR CITY
SUTTER CREEK
JACKSON
IONE
Arnold
San Andreas
Murphys
Lockeford
ANGELS
Twin Cities
49
88
124
104
26
12
4
108

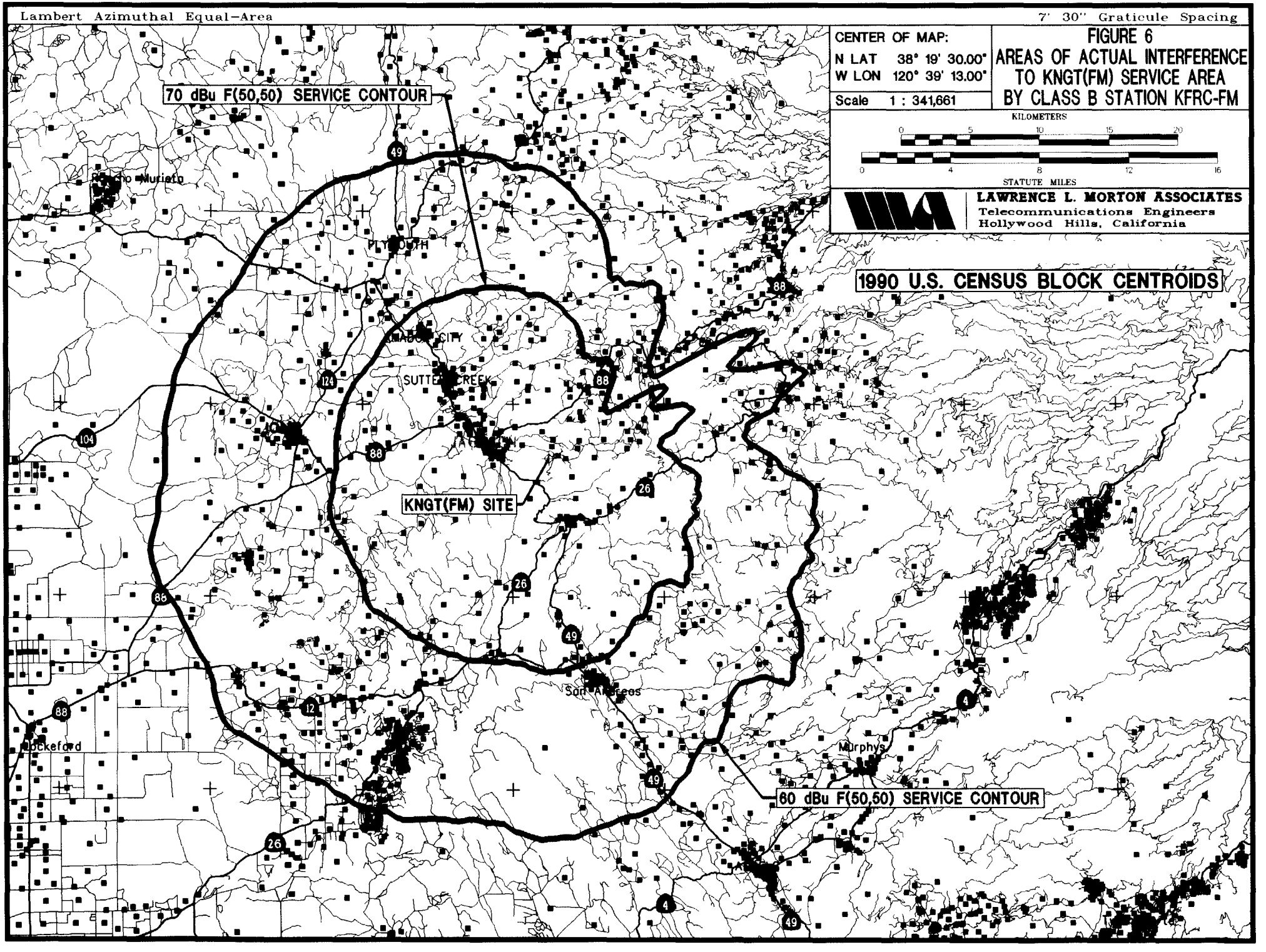

Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
CENTER OF MAP:
N LAT 38° 19' 30.00"
W LON 120° 39' 13.00"
Scale 1 : 341,661
FIGURE 2
F(50,50) SIGNAL STRENGTH PREDICTIONS
BASED ON LONGLEY-RICE MODEL
OF KNGT(FM) CLASS A FACILITY
KILOMETERS
0 5 10 15 20
0 4 8 12 16
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California
KNGT(FM) SITE
Rancho Murieta
PLYMOUTH
AMADOR CITY
SUTTER CREEK
IONE
Lockeford
San Andreas
Murphys
Above 70.0 dBu
68.0 - 70.0 dBu
66.0 - 68.0 dBu
64.0 - 66.0 dBu
62.0 - 64.0 dBu
60.0 - 62.0 dBu
58.0 - 60.0 dBu
56.0 - 58.0 dBu
54.0 - 56.0 dBu
52.0 - 54.0 dBu
50.0 - 52.0 dBu
48.0 - 50.0 dBu
46.0 - 48.0 dBu
44.0 - 46.0 dBu
42.0 - 44.0 dBu
40.0 - 42.0 dBu
38.0 - 40.0 dBu
36.0 - 38.0 dBu
34.0 - 36.0 dBu
32.0 - 34.0 dBu
30.0 - 32.0 dBu
28.0 - 30.0 dBu
26.0 - 28.0 dBu
24.0 - 26.0 dBu
22.0 - 24.0 dBu
20.0 - 22.0 dBu
18.0 - 20.0 dBu
Below 18.0 dBu



Lambert Azimuthal Equal—Area
30' 00" Graticule Spacing
Above 70.0 dBu
68.0 - 70.0 dBu
66.0 - 68.0 dBu
64.0 - 66.0 dBu
62.0 - 64.0 dBu
60.0 - 62.0 dBu
58.0 - 60.0 dBu
56.0 - 58.0 dBu
54.0 - 56.0 dBu
52.0 - 54.0 dBu
50.0 - 52.0 dBu
48.0 - 50.0 dBu
46.0 - 48.0 dBu
44.0 - 46.0 dBu
42.0 - 44.0 dBu
40.0 - 42.0 dBu
38.0 - 40.0 dBu
36.0 - 38.0 dBu
34.0 - 36.0 dBu
32.0 - 34.0 dBu
30.0 - 32.0 dBu
28.0 - 30.0 dBu
26.0 - 28.0 dBu
24.0 - 26.0 dBu
22.0 - 24.0 dBu
20.0 - 22.0 dBu
18.0 - 20.0 dBu
Below 18.0 dBu
KNGT(FM) SITE
KFRC-FM SITE
DAVIS
WINTERS
DIXON
VACAVILLE
NAPA
FAIRFIELD
SUISUN CITY
American Canyon
RIO VISTA
BENICIA
MARTINEZ
CONCORD
PITTSBURG
ANTIOCH
Oakley
BRENTWOOD
Discovery Bay
CLAYTON
PLEASANT HILL
WALNUT CREEK
LAFAYETTE
MORAGA TOWN
Alamo
DANVILLE
PIEDMONT
SAN RAMON
DUBLIN
LIVERMORE
PLEASANTON
Fairview
UNION CITY
FREMONT
NEWARK
MILPITAS
East Foothills
SAN CARLOS
Stanford
WOODSIDE
PALO ALTO
SUNNYVALE
Granada
El Sobrante
EL CERRITO
Rancho Cordova
WEST SACRAMENTO
Florin
Rancho Murieta
PLYMOUTH
Wilton
Elk Grove
AMADOR CITY
SUTTER CREEK
IONE
JACKSON
GALT
Woodbridge
Lockeford
LODI
Morada
Linden
Lincoln Village
STOCKTON
Garden Acres
Country Club
French Camp
MANTECA
TRACY
RIPON
Salida
ESCALON
OAKDALE
RIVERBANK
CENTER OF MAP:
N LAT 38° 00' 55.00"
W LON 121° 34' 39.00"
Scale 1 : 741,947
FIGURE 3
F(50,10) SIGNAL STRENGTH PREDICTIONS
BASED ON LONGLEY-RICE MODEL
OF KFRC-FM AT SAN FRANCISCO
KILOMETERS
0 15 30 45 60
0 5 10 15 20
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California


Lambert Azimuthal Equal—Area
7' 30" Graticule Spacing
CENTER OF MAP:
N LAT 38° 19' 30.00"
W LON 120° 39' 13.00"
Scale 1 : 341,661
FIGURE 4
F(50,10) SIGNAL STRENGTH PREDICTIONS
BASED ON LONGLEY-RICE MODEL
OF KFRC-FM IN SAN FRANCISCO
KILOMETERS
0 5 10 15 20
0 4 8 12 16
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California
KNGT(FM) SITE
Rancho Murieta
PLYMOUTH
Lockeford
Above 70.0 dBu
68.0 - 70.0 dBu
66.0 - 68.0 dBu
64.0 - 66.0 dBu
62.0 - 64.0 dBu
60.0 - 62.0 dBu
58.0 - 60.0 dBu
56.0 - 58.0 dBu
54.0 - 56.0 dBu
52.0 - 54.0 dBu
50.0 - 52.0 dBu
48.0 - 50.0 dBu
46.0 - 48.0 dBu
44.0 - 46.0 dBu
42.0 - 44.0 dBu
40.0 - 42.0 dBu
38.0 - 40.0 dBu
36.0 - 38.0 dBu
34.0 - 36.0 dBu
32.0 - 34.0 dBu
30.0 - 32.0 dBu
28.0 - 30.0 dBu
26.0 - 28.0 dBu
24.0 - 26.0 dBu
22.0 - 24.0 dBu
20.0 - 22.0 dBu
18.0 - 20.0 dBu
Below 18.0 dBu


Lambert Azimuthal Equal—Area
7' 30" Graticule Spacing
CENTER OF MAP:
N LAT 38° 19' 30.00"
W LON 120° 39' 13.00"
Scale 1 : 341,661
FIGURE 5
AREAS OF ACTUAL INTERFERENCE
TO KNGT(FM) SERVICE AREA
BY CLASS B STATION KFRC-FM
KILOMETERS
0 5 10 15 20
0 4 8 12 16
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California
70 dBu F(50,50) SERVICE CONTOUR
60 dBu F(50,50) SERVICE CONTOUR
KNGT(FM) SITE
Rancho Murieta
PLYMOUTH
MACOR CITY
SUTTER CREEK
JACKSON
IONE
Lockeford
San Andreas
Murphys
Arnold
ANGELS
49
88
124
104
26
86
12
4


Lambert Azimuthal Equal-Area
7' 30" Graticule Spacing
CENTER OF MAP:
N LAT 38° 19' 30.00"
W LON 120° 39' 13.00"
Scale 1 : 341,661
FIGURE 6
AREAS OF ACTUAL INTERFERENCE
TO KNGT(FM) SERVICE AREA
BY CLASS B STATION KFRC-FM
KILOMETERS
0 5 10 15 20
0 4 8 12 16
STATUTE MILES
LAWRENCE L. MORTON ASSOCIATES
Telecommunications Engineers
Hollywood Hills, California
70 dBu F(50,50) SERVICE CONTOUR
1990 U.S. CENSUS BLOCK CENTROIDS
KNGT(FM) SITE
60 dBu F(50,50) SERVICE CONTOUR
PLYMOUTH
SUTTER CREEK
Murphys
Rockford
49
88
124
104
26
86
12
4

PREDICTED FIELD STRENGTH			LONGLEY-RICE PROPAGATION MODEL
FREQUENCY = 99.70 MHz	POLARIZATION = H	HOR Eo = 1402.9 mV/m at 1 Km	NUMBER OF ELEMENTS = 1
SOIL CONDUCTIVITY = 5.0 mS/m	MEAN SURFACE REFRACTIVITY = 301.0 N-Units		DIELECTRIC CONSTANT = 15.0
RCVG ANTENNA = 9.0 m AG	XMTG ANTENNA = 452.0 m AMSL	BEAM TILT = 0.00 Deg.	NULL FILL = 0.0 %
URBAN CLUTTER LOSS = 0.0 dB		VEGETATION LOSS = 0.0 dB	

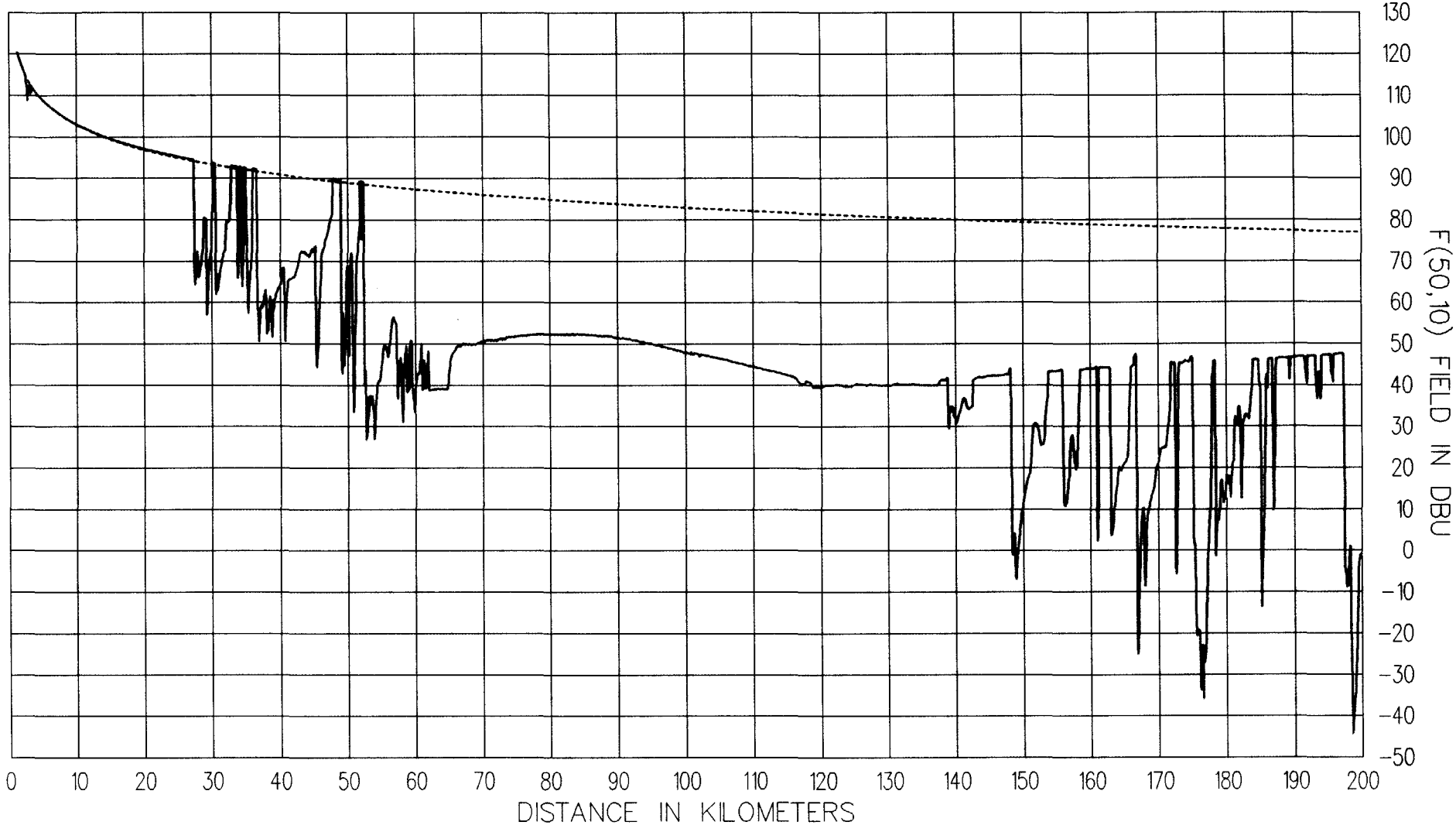


FIGURE 7

N 63.69° E Radial

KFRC-FM TOWARD KNGT(FM) SITE

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Hollywood Hills, California